



Docket No.: 239284US0

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :

Sandrine DECOSTER, et al.  
V.

: EXAMINER: ARNOLD, ERNST

SERIAL NO: 10/608,264 :

FILED: JUNE 30, 2003 :

GROUP ART UNIT: 1616

FOR: COMPOSITION CONTAINING :  
A QUATERNARY SILICONE, A  
CATION AND TWO CATIONIC POLYMERS  
AND METHOD OF USE

DECLARATION UNDER 37 C.F.R. 1.132

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:

I, FREDERIC WOODLAND hereby declare:

1. I am employed by L'ORÉAL as an engineer and have experience in the field of cosmetics preparing and analyzing compositions.

2. The following observations and experiments were carried out by me or under my direct supervision and control.

3. The following three compositions were prepared:

Ingredient	Invention Composition	Comparative Composition A	Comparative Composition B
Cetyl trimethyl ammonium chloride (Dehyquart AOR, Cognis)	0.8 g (active material)	0.8 g (active material)	0.8 g (active material)
Quaternium-80 (50% active material in propylene glycol) (Abilquat 3272, Goldschmidt)	0.5 g (active material)	0.5 g (active material)	0.5 g (active material)
Hydroxypropylguar (Jaguar HP105, Rhodia Chimie)	0.2 g	0.2 g	0.2 g
Polyquaternium-10 (JR400 Rhodia Chimie)	0.5 g (active material)		1.07 g (active material)
Polyquaternium-44 (Luviquat Care, BASF)	0.57 g (active material)	1.07 g (active material)	
Hydroxyethylcellulose (Cellosize Polymer PCF-10, Union Carbide)	0.7 g	0.7 g	0.7 g
Citric Acid	0.5 g	0.5 g	0.5 g
Sodium Methylparaben	0.3 g	0.3 g	0.3 g
Water	Qs 100	Qs 100	Qs 100

These compositions were virtually identical except that the Invention Composition contained two cationic polymers, whereas the comparative compositions contained only a single cationic polymer.

4. The Invention Composition was compared directly with both Comparative Composition A and Comparative Composition B. These direct comparisons were accomplished by (a) washing the hair of six testers; (b) treating ½ of the head of each tester with the Invention Composition and the other ½ of the head with the Comparative Composition being tested (approximately 6 g of each composition was applied to the

appropriate half of the head); (c) leaving the compositions on the hair for 5 minutes; and (d) rinsing the compositions out of the hair with water.

5. After step (b), the texture of the compositions was noted. Specifically, the compositions were judged on their feeling of smoothness or on the melting sensation: the greater this feeling, the easier it was to apply the composition to the hair.

6. After step (d), the suppleness of the hair was determined.

7. The results of these direct comparisons were as follows.

Characteristic	Invention Composition	Comparative Composition A
Composition Texture ("melting feeling") (average of the six testers)	2.2	1.9
Hair Suppleness (average of the six testers)	3.3	2.9

Characteristic	Invention Composition	Comparative Composition B
Composition Texture ("melting feeling") (average of the six testers)	1.6	1.3
Hair Suppleness (average of the six testers)	2.8	2.6

8. As demonstrated by these results, the Invention Composition containing two cationic polymers possessed improved texture properties as well as provided hair with improved suppleness as compared to compositions containing either of the cationic polymers individually. In other words, the Invention Composition possessed better application properties to hair than the Comparative Compositions (for example, it had a more pleasant feeling upon application to hair than the Comparative Compositions and spread more homogeneously than the Comparative Compositions), and provided the hair with better cosmetic properties (suppleness). This vast difference in properties between the Invention

Composition and the Comparative Compositions was surprising and unexpected given the similarity of the compositions.

9. Based on the above results, specifically, and my research experience, generally, the improved properties obtained with the Invention Composition are representative of the present invention. That is, I would expect compositions containing water, at least one silicone containing quaternary ammonium groups, at least one cationic surfactant, at least two different cationic polymers, and at least one nonionic and nonassociative thickening polymer, to possess improved cosmetic properties like those of the exemplified Invention Composition. I have no reason to expect otherwise.

10. The difference in cosmetic properties between the Invention Composition and the Comparative Compositions demonstrates the surprising and unexpected benefit derived from having at least two cationic polymers in the Invention Compositions.

11. The improved cosmetic properties associated with the invention compositions are commercially significant. Clearly, pleasant, easily-applied compositions are more commercially viable than unpleasant, less effective compositions.

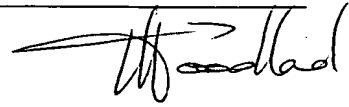
12. The undersigned petitioner declares further that all statements made herein of her own knowledge are true and that all statements made on information and belief are believe to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

13. Further deponent sayeth not.

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Name FREDERIC WOODLAND

Signature

A handwritten signature in dark ink, appearing to read 'F. Woodland', written over a horizontal line.

Date

February 8<sup>th</sup> 2007